

CLAIMS

1. Apparatus for playing an interactive application using a DVD player that generates images on a TV responsive to addressed image data on a DVD, the apparatus comprising:
 - a DVD having application images encoded at addressed locations on the DVD;
 - 5 an interface unit comprising an IR transmitter, at least one user input device and a processor;
 - a readable memory device (RMD), separate from the DVD, encoded with at least one algorithm for determining a DVD image address responsive to activation of the at least one input device by a user;
- 10 wherein the processor determines an image address responsive to the at least one algorithm and activation of the at least one input device and controls the IR transmitter to transmit an IR signal encoding the address to the DVD player.
2. Apparatus according to claim 1 wherein the interface unit comprises a memory.
- 15 3. Apparatus according to claim 2 wherein the interface unit stores information responsive to user activation of the at least one input device in the memory.
4. Apparatus according to claim 3 wherein the interface unit transmits an address responsive to the stored user activation information
- 20 5. Apparatus according to any of claims 2 -4 wherein the interface unit comprises a clock.
6. Apparatus according to claim 5 wherein the interface unit stores temporal information responsive to user activation of the at least one input device in the memory.
- 25 7. Apparatus according to claim 6 wherein the interface unit transmits an address responsive to the stored temporal information.
- 30 8. Apparatus according to any of claims 5- 7 wherein the processor determines content of an image displayed on the TV responsive to an elapsed time on the clock.
9. Apparatus according to claim 8 wherein the interface unit transmits an address responsive to the determined content.

10. Apparatus according to any of claims 5- 9 wherein the processor determines where on the TV screen an element in an image on the screen is located responsive to elapsed time on the clock.

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11. Apparatus according to claim 10 wherein the interface unit transmits an address responsive to the location of the element.

12. Apparatus according to any of claims 1-11 wherein images generated on the TV by the
10 DVD comprise optical codes that identify the images.

13. Apparatus according to claim 12 wherein the interface unit comprises an optical code reader that transmits signals responsive to the sensed codes to the processor, which processes the signals to determine which image is displayed on the TV.

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14. Apparatus according to any of claims 1-13 wherein the DVD is encoded with audio data associated with images encoded on the DVD and when the DVD generates an image on the TV associated with audio data, the DVD controls the TV to generate audio signals responsive to the associated audio data.

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15. Apparatus according to claim 14 wherein the audio signals comprise an audio code identifying the generated image.

16. Apparatus according to claim 15 wherein the interface unit comprises an acoustic
25 sensor that transmits signals responsive to the audio code to the processor, which processes the signals to determine which image is displayed on the TV.

17. Apparatus according to claim 13 or claim 16 wherein if a determined image does not correspond to an image address transmitted by the interface unit, the interface unit retransmits
30 the address.

18. Apparatus according to claim 17 wherein the interface unit comprises a display screen.

19. Apparatus according to claim 18 wherein if an image displayed on the TV does not correspond to an image address transmitted by the interface unit, the interface unit generates a signal indicating that there is a malfunction that requires user intervention is required.
- 5 20. Apparatus according to any of claims 1-19 wherein the at least one input device comprises a keyboard.
21. Apparatus according to any of claims 1-20 wherein the at least one input device comprises a joystick.
- 10 22. Apparatus according to any of the preceding claims wherein the RMD comprises a DVD.
23. Apparatus according to any of the preceding claims wherein the RMD comprises a CD.
- 15 24. Apparatus according to any of the preceding claims wherein the RMD comprises a memory stick.
25. Apparatus according to any of the preceding claims wherein the RMD comprises a
20 smart card.